

# Notice of Allowability

Application No.

10/708,986

Examiner

Rita Leykin

Applicant(s)

CHEN ET AL.

Art Unit

2837

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to \_\_\_\_\_.
2. ☒ The allowed claim(s) is/are 1-20.
3. ☒ The drawings filed on 06 April 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 4/6/04
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

RITA LEYKIN  
PRIMARY EXAMINER  
*Rita Leykin*

### REASONS FOR ALLOWANCE

1. The following is an examiner's statement of reasons for allowance. The prior art made of record in the attached form PTO-892 considered to be pertinent to the submitted application.

Korte, Jr. US# 4,066,945 discloses a linear driving circuit for a dc motor with current feedback. Wherein the linear current circuit includes a full bridge drive with across connected motor 30. Wherein the upper switching elements 36 and 78 connected to the first power supply terminal and lower pare of switching elements is connected to ground terminal +V. The motor driving current is being applied between first and second parts 32a and 32b of the bridge that connected to motor terminals 30a and 30b. Korte Jr. discloses current sensing circuit for detection of driving current supplied to the motor that is presented in form of sensing resistances 83, 84. The output of operational amplifier 94 is the actual current of motor 30. Current 11 obtained from the logic circuit and intended to drive motor 30, in other words a command current, (see column 1, lines 58-68 and column 2, lines 1-68, and column 3, lines 1-50).

Landseadel US # 5,153,492 teaches a servoamplifier that is used for driving power transistors supplying current to a dc servo motor. Wherein the servo amplifier includes a control signal input, (command signal), tach signal input representing actual speed signal, circuitry coupled to the inputs for creating an error signal between the control signal and the tach signal. The power transistor drive circuitry adapted to be coupled to the power transistors, (see abstract).

However, none of the prior art teaches or suggests a combination of:

- The at least one error signal being electrically separated from the first and second switching units;
- A feedback circuit coupled to the error amplifier so as to apply at least one error signal selectively to the first or the second linear units;
- A state control circuit for synchronously controlling the first and second switching units and the feedback circuit such that during a first operational period the first switching unit is operated in a nonconductive mode, the second switching unit is operative in conductive mode, the feedback circuit allows at least one of the error signal to be applied to the first linear unit for operating in a linear mode, and the feedback circuit prevents the at least one error signal from being applied to the second linear unit, thereby controlling the driving current to become substantially proportional to the command current signal.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

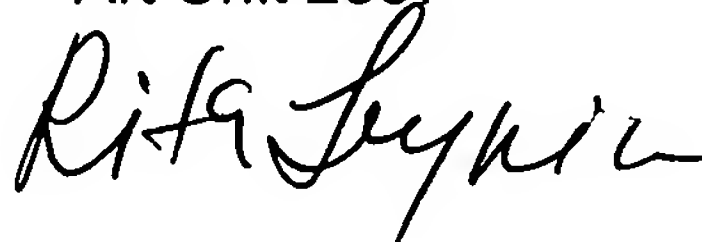
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rita Leykin whose telephone number is (571)272-2066. The examiner can normally be reached on Monday-Friday 8:30-6:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Martin can be reached on (571)272-2107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Rita Leykin  
Primary Examiner  
Art Unit 2837



R.L.